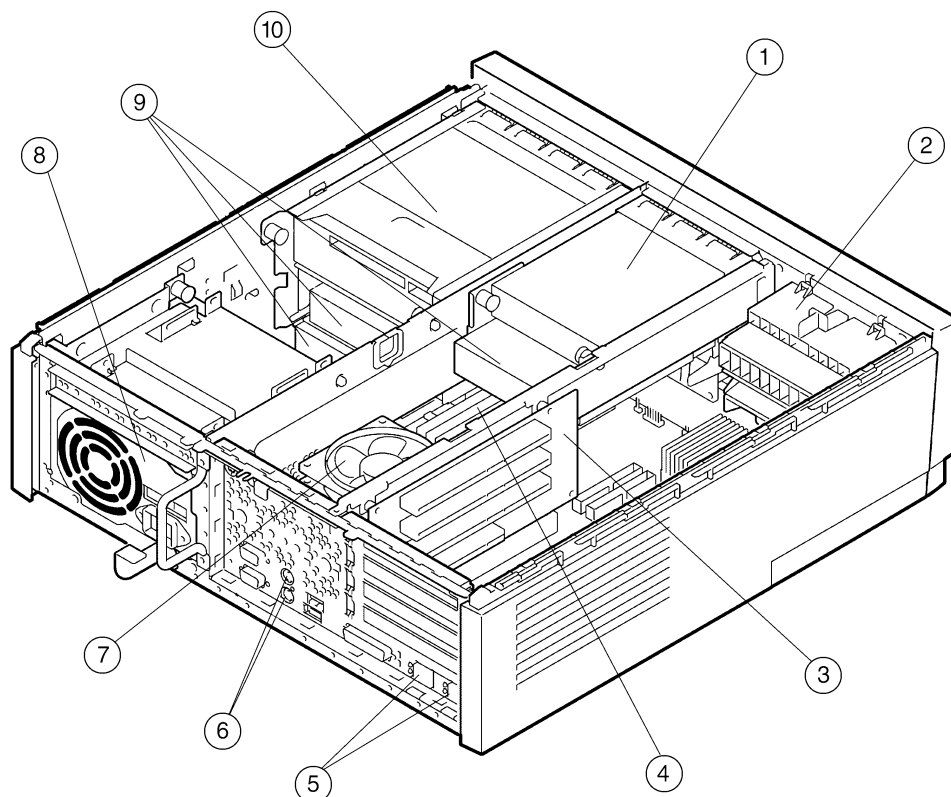


Overview

At A Glance

AlphaServer/AlphaStation DS10 3U Systems include:

- Alpha processor module with either a 466-MHz or 600-MHz CPU with 2-MB onboard ECC cache
- 256-MB, 512-MB, or 1-GB SDRAM memory – expandable to 2-GB maximum memory capacity
- Onboard dual IDE controller for internal storage
- Onboard dual 10/100 BaseT Ethernet ports
- Four PCI expansion slots – three 64-bit PCI slots and one 32-bit PCI slot
- 1.44-MB diskette drive
- 40X 600-MB CD-ROM drive
- Three internal 3.5" x 1" hard disk drives **or** two internal 3.5" x 1" hard disk drives and one 5.25" x 1.6" removable media device
- Internal storage capacity up to 109 GB (SCSI)
- Two serial ports: COM1 port is both an RMC port with modem control and a full-duplex asynchronous communications port; COM2 port is a full-duplex asynchronous communications port
- Bi-directional enhanced parallel port
- PS/2-style keyboard port and mouse port
- 300W (120/240V, 60/50 Hz) power supply
- U.S. English documentation
- Tru64™ UNIX or OpenVMS Factory Installed Software; Linux-Ready systems available
- 90-day software product warranty
- Protected by Compaq Services, including three-year, on-site hardware with next business day response
- **Note: Keyboard, power cord, and mouse must be ordered separately**



1. Diskette drive
2. Fan
3. PCI riser card
4. Memory boards
5. Dual Ethernet ports

6. Keyboard and mouse ports
7. CPU and fan
8. Power supply
9. Disks
10. CD-ROM drive

Standard Features

| | | |
|---------------------|--|---|
| Processor | Alpha 21264 466-MHz processor | |
| Cache Memory | 2-MB onboard cache | |
| Upgradability | Supports upgrades of memory and hard drives Standard | One CPU |
| Memory | Standard | 256 MB, 512 MB, or 1 GB (one memory kit) – Tru64 UNIX, OpenVMS and 512 MB or 1 GB – Linux-Ready |
| | Maximum | 2 GB (two memory kits, kits include two industry-standard DIMMs with ECC support) |
| Network Controller | Onboard dual 10/100 BaseT Ethernet ports | |
| Expansion | Storage bays | Five (diskette drive bay, CD-ROM drive bay, and three storage bays – three internal 3.5" x 1" hard disk drives) or two internal 3.5" x 1" hard disk drives and one 5.25" x 1.6" removable media device |
| | PCI slots | Four full-length slots (three 64-bit, one 32-bit) |
| Storage | Diskette Drive | 1.44-MB diskette drive |
| | CD-ROM | 5.25" half height 40X CD-ROM drive |
| | Hard Drives | 20-GB, and 40-GB IDE disk drives or 9.1-GB, 18.2-GB, 36.4-GB Wide Ultra3 |
| | | SCSI disk drives available with optional SCSI controller |
| Storage Controller | Onboard IDE controller for internal storage, choice of optional storage controllers | |
| Expansion Ports | Parallel | One bi-directional enhanced port |
| | Serial | Two ports, one serial port with full-duplex asynchronous modem control and one RMS dedicated serial port with full-duplex asynchronous modem control |
| | Keyboard | One PS/2-style port |
| | Mouse | One port |
| Power Supply | 300W (120/240V, 60/50 Hz) | |
| Manageability | Compaq Insight Manager | |
| Supported Options | A detailed summary of options supported on the AlphaServer/AlphaStation DS10 is available at http://www.compaq.com/alphaserver/options/asds10/ds10_options.html | |
| OS Support | <p>AlphaServer DS10 Tru64 UNIX systems include pre-installed software (V5.1), Base license, Unlimited User license, Server Extension license, Internet Express, iPlanet Directory Server, iPlanet Enterprise Server, and Compaq Secure Web Server.</p> <p>AlphaStation DS10 Tru64 UNIX systems include pre-installed software (V5.1), 2-user Base license, and Compaq Open3D traditional license.</p> <p>AlphaServer DS10 OpenVMS systems include pre-installed software (V7.2-1), Base license with System Manager license and Compaq Enterprise Integration Server License Package for OpenVMS V3.0A.</p> <p>AlphaStation DS10 OpenVMS systems include pre-installed software (V7.2-1), Base license, Concurrent Use 1-user license, NAS 150 Client license, and Compaq Open3D traditional license.</p> <p>Minimum OS support: Tru64 UNIX V4.0F or OpenVMS V7.1 -2</p> | |
| Service and Support | Protected by Compaq Services, including a three-year, on-site hardware warranty with next business day response. Software warranty is a 90-day telephone advisory. Training, consulting, network integration, software support, comprehensive system maintenance and guaranteed uptime services are also available for customers requiring higher levels of service and support. | |

Systems/Options

Step 1 – Select system

AlphaServer/AlphaStation DS10 systems require the **mandatory** selection of the following items:

- IDE or SCSI system disk drive
- SCSI adapter and SCSI cable kit required for internal SCSI disks and tape
- Country-specific power cord
- Software media and documentation for first system on site
- Rackmount kit for rackmount systems (See Step 5 – M-series Cabinet Enclosures)
- Minimum OS support: Tru64 UNIX V4.0F or OpenVMS V7.1-2

Notes: Country-specific keyboard and mouse are recommended

For system integration of any options with 6-3 part numbers, contact *CustomSystems*

| AlphaServer DS10 Systems | | | | | | | |
|--------------------------|---------|--------|-----------|----------------|----------------|------------|-------------|
| OS | CPU | Memory | PCI Slots | IDE Controller | Ethernet Ports | Hard Drive | Order No. |
| Tru64 UNIX | 466 MHz | 256 MB | 1 | Onboard | Onboard | Mandatory | DA-PB10A-AC |
| Tru64 UNIX | 466 MHz | 512 MB | 1 | Onboard | Onboard | Mandatory | DA-PB10A-AD |
| Tru64 UNIX | 466 MHz | 1 GB | 1 | Onboard | Onboard | Mandatory | DA-PB10A-AE |
| | | | | | | | |
| OpenVMS | 466 MHz | 256 MB | 1 | Onboard | Onboard | Mandatory | DY-PB10A-AC |
| OpenVMS | 466 MHz | 512 MB | 1 | Onboard | Onboard | Mandatory | DY-PB10A-AD |
| OpenVMS | 466 MHz | 1 GB | 1 | Onboard | Onboard | Mandatory | DY-PB10A-AE |
| | | | | | | | |
| Linux-Ready | 466 MHz | 512 MB | 1 | Onboard | Onboard | Mandatory | DJ-PB10A-BD |
| Linux-Ready | 466 MHz | 1 GB | 1 | Onboard | Onboard | Mandatory | DJ-PB10A-BE |
| | | | | | | | |

Options

Step 2 – Mandatory options

Step 2a – System Disk Drive – Mandatory

- Selection of one system disk drive is mandatory

AlphaServer DS10 Storage Configuration Rules:

- Systems include 600-MB 40X CD-ROM drive and 1.44-MB diskette drive in dedicated drive slots
- Systems include three internal storage bays that can be configured as follows:
 - Maximum of three internal disk drives (3.5" x 1" drives) **or** two internal disk drives (3.5" x 1") and one removable 5.25" half height removable media device (one 3.5" x 1" hard disk drive is supported in removable media bay)
- SCSI adapter and SCSI cable kit required for SCSI disks or tapes

| | | |
|---------------------------|--|-------------|
| IDE Disk Drives | 20-GB 7,200 rpm IDE drive | 3X-RE58A-AA |
| | 40-GB 7,200 rpm IDE drive | 3X-RE58A-BA |
| | Note: Requires console firmware update – update available at http://ftp.digital.com/pub/Digital/Alpha/firmware/interim/ds10/v5.9-6/ | |
| Internal SCSI Disk Drives | 9.1-GB 7,200 rpm Ultra2 SCSI drive | DS-RZ2DA-WA |
| | 9.1-GB 10,000 rpm Ultra3 SCSI drive | DS-RZ3DD-WA |
| | 18.2-GB 7,200 rpm Ultra2 SCSI drive | DS-RZ2EA-WA |
| | 18.2-GB 10,000 rpm Ultra3 SCSI drive | DS-RZ3EF-WA |
| | 36.4-GB 10,000 rpm Ultra3 SCSI drive | DS-RZ3FD-WA |

Step 2b – Internal SCSI Adapter and Cable Kit – (Internal SCSI disks require SCSI adapter and SCSI cable kit)

| | | |
|-------------------------------------|--|-------------|
| SCSI Adapters (for Internal Drives) | PCI 1-channel Ultra2 LVD SCSI adapter | 3X-KZPCA-AA |
| | PCI 2-channel multi-mode Ultra3 LVD SCSI adapter, VHDCI (Tru64 UNIX V5.1 only) | 3X-KZPEA-DB |
| | Note: Patch kit required, kit available at http://ftp1.support.compaq.com/public/Digital_UNIX/v5.1/ | |
| | PCI combo card–PCI 2-channel UltraSCSI single-ended adapter and 10/100 Mbit Ethernet | KZPCM-DA |
| | PCI combo card–PCI 1-channel Ultra2 LVD SCSI, 2D Graphics, 10/100 Ethernet (Tru64 UNIX and OpenVMS only) | 3X-DEPVZ-AA |
| | PCI 1-channel UltraSCSI RAID controller (Tru64 UNIX and OpenVMS only) | KZPAC-AA |
| | PCI 3-port UltraSCSI RAID controllers (4-MB/8-MB cache) (Tru64 UNIX V4.0F, OpenVMS V7.2-1) | KZPAC-CA/CB |
| | PCI 1-channel Ultra2 SCSI RAID controller, 4-MB cache (Linux-Ready Systems only) | SN-KZPBC-AA |
| | PCI 3-channel Ultra2 SCSI RAID controller, 32-MB cache (Linux-Ready Systems only) | FR-PCTAR-IB |
| | PCI 3-channel Ultra2 SCSI RAID controller, 64-MB cache (Linux-Ready Systems only) | FR-PCTAR-IC |
| SCSI Cable Kit | AlphaServer DS10 SCSI cable kit (connections for three internal drives) | 3X-BN51A-SE |

Options

Step 2 – Mandatory options *(continued)*

Step 2c – Power Cords – Mandatory for Desktop and Rackmount Systems

| | | |
|--|---------------------------------------|-------------|
| Desktop Power Cords | North America, 2.5 m | 3X-BN46K-2E |
| | Australia, New Zealand, 2.5 m | BN19H-2E |
| | Central Europe, 2.5 m | BN19C-2E |
| | China, Australian AS 3112-1981 | BN35S-02 |
| | China, NA NEMA 5-15 plug | BN35A-01 |
| | Denmark, 2.5 m | BN19K-2E |
| | Egypt, India, South Africa, 2.5 m | BN19S-2E |
| | Israel, 2.5 m | BN18L-2E |
| | Italy, 2.5 m | BN19M-2E |
| | Japan, 2.5 m, Dentori approved | 3X-BN46G-02 |
| | Switzerland, 2.5 m | BN19E-2E |
| | UK, Ireland, 2.5 m | BN19A-2E |
| | | |
| Rackmount (M-series Cabinet) Power Cords | US/Canada | BN20Z-4E |
| | Non-US | 3X-BN46L-4E |
| | Japan, 4.5 m (right- angle connector) | 3X-BN46D-4E |

Step 3 – Memory – Optional

- Maximum 2-GB memory
- Systems include one memory kit; maximum two memory kits per system – Each kit includes two industry-standard DIMMs with ECC support

| | |
|---|-------------|
| 256-MB memory kit, two 200-pin, 100-MHz, 128-MB DIMMs | 3X-MS310-CA |
| 512-MB memory kit, two 200-pin, 100-MHz, 256-MB DIMMs | 3X-MS310-DA |
| 1-GB memory kit, two 200-pin, 100-MHz, 512-MB DIMMs (Tru64 UNIX and OpenVMS only) | 3X-MS310-EA |

Step 4 – Internal Storage (Removable Media)— Optional

AlphaServer DS10 Storage Configuration Rules:

- Systems include 600-MB 40X CD-ROM drive and 1.44-MB diskette drive in dedicated drive slots
- Systems include three internal storage bays which can be configured as follows:
 - Three internal disk drives (3.5" x 1" drives) **or**
two internal disk drives (3.5" x 1") and one 5.25" half height removable media device (one 3.5" x 1" hard disk drive is supported in removable media bay)
- SCSI Host Bus adapter and SCSI cable kit required for internal SCSI disks or tapes

| | |
|--|-------------|
| 12/24-GB DAT 4mm internal SCSI tape drive (requires SN-PBXKP-BA wide-to-narrow SCSI adapter) (Tru64 UNIX and OpenVMS only) | TLZ10-LB |
| 20/40-GB DAT tape drive, top gun blue (Tru64 UNIX and OpenVMS only) | 3X-SD20X-LB |
| 35/70-GB AIT tape drive, top gun blue (Tru64 UNIX and OpenVMS only) | 3X-SZ35X-LB |
| 35/70-GB AIT tape drive (LVD), carbon black | 3R-A2392-AA |
| 50/100-GB AIT tape drive, top gun blue (Tru64 UNIX and OpenVMS only) | 3X-SZ50X-LB |
| Wide-to-narrow SCSI adapter | SN-PBXKP-BA |

Step 4-a– External Storage (Removable Media) – Optional

| | |
|---|-------------|
| 40/80-GB DLT tape drive in StorageWorks carrier | DS-TZ90N-VW |
| 20/40-GB DLT tape drive in StorageWorks carrier (Tru64 UNIX and OpenVMS only) | TZ88N-VA |

Note: Detailed information regarding media can be found at
<http://www.compaq.com/products/storageworks/mediafamily/>

Options

Step 5 – M-series Cabinets – Optional

M-series cabinet enclosures support up to 12 AlphaServer DS10 systems (H9A15)

M-series enclosures require selection of the following items:

- H9A10 or H9A15 Cabinet, 120V or 240V
- Cabinet front door based on cabinet height
- Factory integration

Cabinet Configuration Chart for AlphaServer DS10 Rackmount Systems:

- A minimum of two AlphaServer DS10 systems is required in the H9A15 M-series cabinet.
- Each system requires an AlphaServer DS10 M-series Rackmount kit (3X-PBX01-AB).
- Each system requires a rack mount power cord.
- Up to six BA356 shelves supported; shelves cannot be mounted behind AlphaServer DS10 systems.

Notes: The number of ballast kits required is determined by the number of system boxes. Ballast kits are required according to the following chart:

For more information on M-series Cabinet Enclosures, see www.compaq.com/alphaserver/products/m-series/index.html

Cabinet Configuration Chart for AlphaServer DS10 (3U) with StorageWorks Shelves (4U)

| M-series Cabinet | System Rack Kit per DS10 system | M-series Cabinet Height/Space | AlphaServer DS10 Systems | StorageWorks BA356/DS-SL13R Disk Shelves | Ballast Kits Required |
|------------------|---------------------------------|-------------------------------|--------------------------|--|-----------------------|
| H9A10-MC/MD | 3X-PBX01-AB | 56" / 32U | 1 or 2 | 6 | 2 |
| | | | 3 or 4 | 6 | 1 |
| | | | 5 | 6 | 1 |
| | | | 6 | 4 | 0 |
| | | | 7 | 2 | 0 |
| | | | 8, 9, or 10 | 0 | 0 |
| H9A15-MC/MD | 3X-PBX01-AB | 66.5" / 39U | 2 or 3 | 6 | 2 |
| | | | 4 | 6 | 1 |
| | | | 5 | 6 | 1 |
| | | | 6 | 4 | 1 |
| | | | 7 | 2 | 0 |
| | | | 8 to 12 | 0 | 0 |

Options

Step 5 – M-series Cabinets – Optional *(continued)*

Cabinet Configuration Chart for AlphaServer DS10 (3U) Rackmount Systems with RA3000 and Disk Shelves (12U)

- 12U of vertical cabinet space is reserved for one RA3000 controller shelf and up to five disk shelves mounted in top of cabinet, front to back; an additional 2U of vertical space is required for RA3000 controller shelf UPS.
- Disk shelves can be a combination of RA3000 DS-SWXRA-GN disk shelves and StorageWorks BA36R-RC/RD disk shelves.
- RA3000 controller shelf supports a maximum of four DS-SWXRA-GN disk shelves; third and fourth DS-SWXRA-GN disk shelf ordered will be installed in rear of M-series cabinet; rear mounted shelves require that a 2-m SCSI cable (BN37A-02) be ordered separately.
- Systems are supported in remaining vertical space. The following table considers space requirements for the AlphaServer DS10 system boxes and RA3000.
- For ballast requirements refer back to "Cabinet Configuration Chart for AlphaServer DS10 (3U) with StorageWorks Shelves (4U)."

| M-series Cabinet | System Rack Kit per DS10 system | M-series Cabinet Height/Space | AlphaServer DS10 Systems | StorageWorks RA3000 + Shelves |
|------------------|---------------------------------|-------------------------------|--------------------------|-------------------------------|
| H9A10-MC/MD | BA36R-RC/RD | 54.2" / 32U | 1 | 1 + 5 |
| | | | 2 | 1 + 5 |
| | | | 3 | 1 + 5 |
| H9A15-MC/MD | BA36R-RC/RD | 66.5" / 39U | 2 | 1 + 5 |
| | | | 2 | 1 + 5 |
| | | | 3 | 1 + 5 |
| | | | 4 | 1 + 5 |

Cabinet Configuration Chart for AlphaServer DS10 (3U) with StorageWorks BA370 (20U) and Disk Shelves

- 20U of vertical cabinet space is reserved for one front-mounted BA370 rackmount enclosure, or one front-mounted and one rear-mounted BA370 enclosure in top of cabinet, front to back. Note that top fan (1U) is removed from cabinet when BA370 rackmount enclosure is installed.
- Systems and StorageWorks shelves are supported in remaining vertical space; StorageWorks shelves are not supported in rear of cabinet behind a front-mounted BA370 rackmount enclosure.

Cabinet Configuration Rules for AlphaServer DS10 with BA370 and Disk Shelves

| Cabinet | Cabinet Rack Kit for BA370 | Cabinet Height/Space | Systems | BA370 Enclosures | Shelves |
|-------------|----------------------------|----------------------|---------|------------------|---------|
| H9A10-MC/MD | BA36R-RC/RD | 54.2" / 32U | 1 | 1 (front) or | 2 |
| | | | 2 | 2 (front & back) | 0 |
| H9A15-MC/MD | BA36R-RC/RD | 66.5" / 40U | 1 | 1 (front) or | 6 |
| | | | 2 | 2 (front & back) | 4 |
| | | | 3 | | 0 |

Note: Installation of one BA370 and one system in H9A15 cabinet requires mandatory selection of a ballast kit; a ballast kit is not required if two BA370s and one system are installed in H9A15 cabinet.

M-series Rackmount Kit for AlphaServer DS10

- Rackmount kit must be ordered separately

AlphaServer DS10 M-series rackmount kit

3X-PBX01-AB

Note: Factory integration of a DS10 system drawer in a Compaq 9000 rackmount cabinet using rack kit, 3X-PBX01-AA, is not supported. Contact CustomSystems.

Options

Step 5 – M-series Cabinets – Optional *(continued)*

| | | |
|--|--|-------------|
| M-series Cabinets | 67" cabinet enclosure with 54.2" or 33U of usable vertical space; 120V dual-24A controller, each with 10 NEMA 5-15R outlets, input power plug NEMA L5-30P, Americas, Asia Pacific; includes rear door, top fan tray, and two H7600-AA power distribution units | H9A10-MC |
| | 67" cabinet enclosure with 54.2" or 33U of usable vertical space; 240V dual-16 A controller, each with 12 IEC C13 outlets, input power plug IEC 309, 16A, Europe; includes rear door, top fan tray, and two H7600-DB power distribution units | H9A10-MD |
| | 79" cabinet enclosure with 66.5" or 40U of usable vertical space; 120V dual-24A controller, each with 10 NEMA 5-15R outlets, input power plug NEMA L5-30P, Americas, Asia Pacific; includes rear door, top fan tray, and two H7600-AA power distribution units | H9A15-MC |
| | 79" cabinet enclosure with 66.5" or 40U of usable vertical space; 240V dual-16A controller, each with 12 IEC C13 outlets, input power plug IEC 309, 16A, Europe; includes rear door, top fan tray, and two H7600-DB power distribution units | H9A15-MD |
| M-series Cabinet Rackmount Kit for AlphaServer DS10 | <ul style="list-style-type: none"> Rackmount kit must be ordered separately | |
| | AlphaServer DS10 M-series rackmount kit | 3X-PBX01-AB |
| Note: (Refer to the Cabinet Configuration Charts above for configuration rules.) | | |
| StorageWorks Shelves Supported in M-series Cabinets with Front Doors (H9A10/H9A15) | StorageWorks UltraSCSI single bus, single-ended shelf with 180W power supply and RETMA mounting kit | BA36R-RC |
| | StorageWorks UltraSCSI split bus, single-ended shelf with 180W power supply and RETMA mounting kit | BA36R-RD |
| | 180W power supply for redundant power of a BA36R (includes power cord) | CK-BA35X-HH |
| BA370 Rackmount Enclosure/Rear Cabinet Extender | BA370 front-mount rackmount enclosure includes RETMA rackmount kit; first BA370 enclosure must be front mounted in cabinet, 20U height | 2T-BA370-AS |
| | BA370 rear-mount rackmount enclosure includes RETMA rackmount kit; second BA370 enclosure must be rear mounted in cabinet, 20U height | 2T-BA370-AR |
| | Note: Rear Cabinet Extender, H9C10-TE or H9C15-TE, is mandatory for second BA370 | |
| M-series Cabinet Rear Cabinet Extender | Rear cabinet extender, top gun blue, for H9A10-MC/MD cabinets | H9C10-TE |
| | Rear cabinet extender, top gun blue, for H9A15-MC/MD cabinets | H9C15-TE |
| M-series cabinet Front Door | <ul style="list-style-type: none"> Required selection of door based on cabinet height | |
| | Front door, top gun blue, for H9A10-MC/MD cabinet enclosure | H9C10-TF |
| | Front door, top gun blue, for H9A15-MC/MD cabinet enclosure | H9C15-TF |

Options

Step 5 – M-series Cabinets – Optional *(continued)*

| | | |
|--|--|-------------|
| M-series Cabinet Factory Integration – Required | Factory Integration of systems and storage devices assembled and configured in cabinet enclosure for H9A10 or H9A15 cabinet enclosures | YS-ASCAA-AA |
| M-series Cabinet Ballast Kits – As Required | <ul style="list-style-type: none"> Ballast is added to a cabinet at particular locations for specific configurations to meet safety regulations for installation, operation, and service; see Cabinet Configuration Charts | |
| | Two 35-40 lb. steel plates | H9C10-MC |
| M-series Cabinet Rackmount Power Cords | <ul style="list-style-type: none"> Required for BA370 | |
| | US/Canada | BN20Z-4E |
| | Non-US | BN35S-4E |
| | Japan, 2.5m | 3X-BN46D-4E |
| Compaq CustomSystems Support | <ul style="list-style-type: none"> Cabinets containing systems and storage must be assembled by qualified assemblers: Compaq Manufacturing, Compaq CustomSystems, or an authorized Compaq Certified Integration Partner. For custom integration of systems, options, cabinet expansion offerings, and additional Compaq and third-party devices, or for other cabinets, doors, and trim kits of a different color, contact Compaq CustomSystems at 1-800-AT COMPAQ, or your local authorized Compaq Certified Integration Partner. | |

Step 6 – External Storage – Optional

| | | |
|---|---|-------------|
| UltraSCSI Configuration Rules | <ul style="list-style-type: none"> UltraSCSI configurations require UltraSCSI components (controllers, adapters, shelves, disks, and cables) UltraSCSI adapters support UltraSCSI disks at UltraSCSI speeds in UltraSCSI top gun blue shelves (DS-BA356-xx) | |
| UltraSCSI StorageWorks Pedestals | <ul style="list-style-type: none"> UltraSCSI top gun blue pedestals provide support for UltraSCSI disk drives; pedestal is available in single-bus or split-bus configurations and includes a personality module and 180W power supply UltraSCSI shelf supports: seven 3.5" hard disk drives, or one 5.25" device and four 3.5" hard disk drives, or two 5.25" devices and one 3.5" hard disk drive Installation of redundant power supply reduces number of 3.5" drive slots by one | |
| | UltraSCSI single-ended pedestal, single-bus personality module, 180W power supply | DS-BA356-KF |
| | UltraSCSI single-ended pedestal, split-bus personality module, 180W power supply | DS-BA356-KG |
| | UltraSCSI pedestal, single-channel differential personality module, 180W power supply | DS-BA356-KH |
| | 180W power supply, includes 120V North American and 240V IEC power cord | CK-BA35X-HH |

Options

Step 6 – External Storage – Optional *(continued)*

| Tabletop Tape Drives | | |
|---|---|-------------|
| | <ul style="list-style-type: none"> Tape drives require an LVD adapter (3X-KZPCA-AA) or single-ended UltraSCSI adapter (KZPCM-DA) and country-specific power cord | |
| 12/24-GB 4-mm DAT narrow single-ended tabletop SCSI tape, includes 120V North American power cord, requires BN31W-xx SCSI cable | | DS-TLZ10-DB |
| 20/40-GB 4 mm DAT LVD tabletop SCSI tape drive – North America (Tru64 UNIX and OpenVMS only) | | 157770-001 |
| 20/40-GB 4 mm DAT LVD tabletop SCSI tape drive –International (Tru64 UNIX and OpenVMS only) | | 157770-B31 |
| 20/40-GB 4 mm DAT LVD tabletop SCSI tape drive –Japan (Tru64 UNIX and OpenVMS only) | | 157770-291 |
| 35/70-GB AIT LVD tabletop tape drive unit, US | | 216885-001 |
| 35/70-GB AIT LVD tabletop tape drive unit, International | | 216885-B31 |
| 35/70-GB AIT LVD tabletop tape drive unit, Japan | | 216885-291 |
| 50/100-GB 8mm AIT LVD tabletop SCSI tape drive – North America (Tru64 UNIX and OpenVMS only) | | 157767-001 |
| 50/100-GB 8mm AIT LVD tabletop SCSI tape drive –International (Tru64 UNIX and OpenVMS only) | | 157767-B31 |
| 50/100-GB 8mm AIT LVD tabletop SCSI tape drive –Japan (Tru64 UNIX and OpenVMS only) | | 157767-291 |
| 32/64-GB DAT loader in carrier (Tru64 UNIX and OpenVMS only) | | TLZ9L-VA |
| 32/64-GB tabletop DAT loader (Tru64 UNIX and OpenVMS only) | | TLZ9L-DB |
| 20/40-GB SCSI (DLT 4000E) tabletop tape drive (Tru64 UNIX and OpenVMS only) | | TZ88N-TA |
| 40/80-GB SCSI LVD (DLT8000) tabletop tape drive – Worldwide | | 146197-B21 |
| 40/80-GB SCSI LVD (DLT8000) tabletop tape drive –Japan | | 146197-291 |
| 110/220-GB SDLT Ultra2 LVD tabletop tape drive, US | | 192103-001 |
| 110/220-GB SDLT Ultra2 LVD tabletop tape drive, International | | 192103-B31 |
| 110/220-GB SDLT Ultra2 LVD tabletop tape drive, Japan | | 192103-291 |

Options

Step 6 – External Storage – Optional (continued)

Storage Controllers/Host Bus Adapters for StorageWorks Pedestals and Shelves

- Storage controllers require a minimum Operating System Revision of Tru64 UNIX V4.0F or OpenVMS V7.1-2 unless noted otherwise.
- Each storage controller/adaptor uses one PCI slot

| | Maximum # Supported | | | |
|---|---------------------|---------|-------------|-------------|
| | Tru64 UNIX | OpenVMS | Linux-Ready | |
| PCI-to-Fibre Channel host bus adapter | 2 | 2 | - | DS-KGPSA-CA |
| Fibre Channel cable xx=02, 05, 15, 30, 50 meters | | | | BNGBX-xx |
| PCI-to-Fibre Channel 64-bit adapter, HBA | - | - | 2 | DS-SWLA4-PD |
| PCI 2-port UltraSCSI single-ended adapter and 10/100 Mb Ethernet combo adapter | 2 | 2 | 2 | KZPCM-DA |
| VHDCI male-to-VHDCI male UltraSCSI cable, xx=02, 2E (2.5), 03, 05, 10, 20 m) | | | | BN37A-xx |
| PCI 1-port Ultra2 SCSI (LVD) adapter, 68-pin HD connector, requires BN38C cable (2 to 20m) to connect to single-ended UltraSCSI or LVD shelf | 2 | 2 | 3 | 3X-KZPCA-AA |
| 68-pin HD male-to-VHDCI male UltraSCSI cable; required for each external UltraSCSI shelf attached to KZPCA-AA adapter | | | | BN38C-xx |
| PCI 2-channel LVD multi-mode Ultra3 SCSI adapter, VHDCI Note: Patch kit required, kit is available at http://ftp1.support.compaq.com/public/Digital_UNIX/v5.1/ | 1 V5.1 | - | - | 3X-KZPEA-DB |
| PCI 1-port UltraSCSI differential adapter; includes external 68-pin HD connector; requires BN38C-xx cable (2-25m) to connect adapter to Differential UltraSCSI shelf or RAID controller | 2 | 2 | 2 | KZPBA-CB |
| 68-pin HD male-to-VHDCI male UltraSCSI cable; required for each external UltraSCSI shelf attached to KZPBA-CB adapter | | | | BN38C-xx |
| PCI 3-channel Ultra2 LVD RAID controller, 64-bit, 64-MB cache | 2 V4.0F/4.0G/5.1 | - | - | DS-KZPCC-CE |
| PCI 1-channel Ultra2 LVD backplane RAID controller, 64-bit, 16-MB cache | 2 V4.0F/4.0G/5.1 | - | - | DS-KZPCC-AC |
| PCI 1-port UltraSCSI RAID controller with 4-MB cache memory, includes RAID Array 230/Plus Subsystem software and documentation kit and VHDCI female connector; tape drives not supported – 18.2-GB or higher disk drives not supported on KZPAC-xx RAID controllers | 2 V4.0F | 2 | - | KZPAC-AA |
| PCI 3-port UltraSCSI RAID controller with 4-MB cache memory, includes RAID Array 230/Plus Subsystem Software and documentation kit; tape drives not supported; SCSI cable required for each active port; requires BN31K-0E for external third-port connection –18.2-GB or higher disk drives not supported on KZPAC-xx RAID controllers | 2 V4.0F | 2 | - | KZPAC-CA |
| PCI 3-port UltraSCSI RAID controller with 8-MB cache memory, includes RAID Array 230/Plus Subsystem Software and documentation kit; tape drives not supported; SCSI cable required for each active port; requires BN31K-0E for external third-port connection –18.2-GB or higher disk drives not supported on KZPAC-xx RAID controllers | 2 V4.0F | 2 | - | KZPAC-CB |
| Cache battery backup for KZPAC controller | | | | KZPSC-UB |
| VHDCI male-to-VHDCI male UltraSCSI cable, xx=02, 2E (2.5), 03, 05, 10, 20 m) Note: Manufacturing may substitute BN37A-02 cable for specific cabinet configurations | | | | BN37A-xx |

Step 6 – External Storage – Optional (continued)

| | | |
|---|--|----------|
| SCSI cable/bulkhead assembly kit with KZPAC-CA/CB, allows external connection of one third port | | BN31K-0E |
|---|--|----------|

Storage Controllers/Host Bus Adapters for StorageWorks Pedestals and Shelves (continued)

| | Maximum # Supported | | | |
|--|---------------------|---------|-------------|-------------|
| | Tru64 UNIX | OpenVMS | Linux-Ready | |
| SCSI cable/bulkhead assembly kit with two ports for KZPAC-CA/CB, allows external connection of two third ports | | | | KZPAC-SB |
| PCI 1-channel Ultra2 SCSI RAID controller, 4-MB cache (Linux-Ready systems only) | - | - | 3 | SN-KZPBC-AA |
| PCI 3-channel Ultra2 SCSI RAID controller, 32-MB cache (Linux-Ready systems only) | - | - | 3 | FR-PCTAR-IB |
| PCI 3-channel Ultra2 SCSI RAID controller, 64-MB cache (Linux-Ready systems only) | - | - | 3 | FR-PCTAR-IC |

| | | |
|--|--|------------|
| StorageWorks Fibre Channel Switches | Fibre Channel SAN Switch, 8 ports with Fabric Operating Software (DS-DSGGB-AA) | 158222-B21 |
| | Fibre Channel SAN Switch, 16 ports with Fabric Operating Software (DS-DSGGB-AB) | 158223-B21 |
| | Note: For above switches, refer to http://www.compaq.com/products/quickspecs/10457_na/10457_na.HTML for more information | |
| | Fibre Channel SAN Switch 8-EL (DS-DSGGC-AA) – refer to http://www.compaq.com/products/quickspecs/10647_na/10647_na.HTML for more information | 176219-B21 |
| | Fibre Channel SAN Switch 16-EL (DS-DSGGC-AB) – refer to http://www.compaq.com/products/quickspecs/10735_na/10735_na.HTML for more information | 212776-B21 |

| | | |
|---|---|-------------|
| StorageWorks BA370 Rackmount Enclosure | <ul style="list-style-type: none"> M-series cabinets (H9A10 and H9A15) allow one BA370 enclosure to be installed in front cabinet Host adapter, RAID Array controller, platform specific Solutions Software Kit, and disk drives must be ordered separately | |
| | BA370 front mount rackmount enclosure with five 180W power supplies, includes RETMA rackmount kit; first BA370 enclosure must be front mounted in cabinet, 20U height | 2T-BA370-AS |
| | Factory configured RAID of rackmounted BA370/HSZ80 | YS-ASCRD-AA |
| | Note: Factory configured RAID sets for disks in rackmounted BA370 StorageWorks shelf controlled by one or two HSZ70s require completion of questionnaire located at http://www.digital.com/alphaserver/fcr | |
| | | |

| | | |
|--|---|-------------|
| Removable Media Devices for External StorageWorks Shelves | 12/24-GB 4 mm DAT narrow SCSI tape drive in StorageWorks carrier | DS-TLZ10-VA |
| | 20/40-GB DLT tape drive in StorageWorks carrier (Tru64 UNIX and OpenVMS only) | TZ88N-VA |
| | 40/80-GB DLT tape drive in StorageWorks carrier | DS-TZ90N-VW |
| | 35/70-GB AIT tape drive in StorageWorks carrier (Tru64 UNIX and OpenVMS only) | DS-AIT35-VW |
| | 600-MB 32X SCSI CD-ROM drive in StorageWorks carrier | DS-RRD47-VA |

Options

Step 6 – External Storage – Optional *(continued)*

| | | |
|--|---|-------------|
| StorageWorks UltraSCSI Shelves | • Requires selection of UltraSCSI adapter and SCSI cable | |
| | • StorageWorks Shelf supports seven 3.5" x 1.6" hard disk drives; with the addition of redundant power supply, six drives are supported | |
| | • StorageWorks shelf kits are mounted back-to-back in pedestals and cabinets | |
| | StorageWorks UltraSCSI single-bus shelf kit | BA36R-RC |
| | StorageWorks UltraSCSI split-bus shelf kit | BA36R-RD |
| | 3-m SCSI cable | BN37A-03 |
| Disk Drives (Supported in StorageWorks UltraSCSI Shelves) | • Maximum six (10,000 rpm) or seven (7,200 rpm) drives supported in StorageWorks shelf | |
| | • One power supply supports a maximum of six 10,000 rpm disks | |
| | 9.1-GB UltraSCSI drive 7,200 rpm | DS-RZ1DA-VW |
| | 9.1-GB UltraSCSI drive 10,000 rpm | DS-RZ1DD-VW |
| | 18.2-GB UltraSCSI drive 7,200 rpm | DS-RZ1EA-VW |
| | 18.2-GB UltraSCSI drive 10,000 rpm | DS-RZ1ED-VW |
| | 36.4-GB UltraSCSI drive 10,000 rpm | DS-RZ1FC-VW |
| | | |
| StorageWorks Universal Drive Shelves – Model 4314R (Ultra3) | StorageWorks Model 4314R Ultra3 rackmount, single bus, US | DS-SL13R-AA |
| | Same as above, International | DS-SL13R-AB |
| | Same as above, Japan | DS-SL13R-AJ |
| StorageWorks Universal Drive Shelves – Model 4354R (Ultra3) | StorageWorks Model 4354R Ultra3 rackmount, dual bus, US | DS-SL13R-BA |
| | Same as above, International | DS-SL13R-BB |
| | Same as above, Japan | DS-SL13R-BJ |
| StorageWorks Universal Drive Shelves Single Bus – Model 4314T Tower (Ultra3) | StorageWorks Model 4314T, Ultra3, Universal Drive Shelves Single Bus, Tower, US | DS-SL13T-AA |
| | StorageWorks Model 4314T, Ultra3, Universal Drive Shelves Single Bus, Tower, International | DS-SL13T-AB |
| | StorageWorks Model 4314T, Ultra3, Universal Drive Shelves Single Bus, Tower, Japan | DS-SL13T-AJ |
| StorageWorks Universal Drive Shelves – Model 4200 to Model 4300 Upgrade I/O Modules | StorageWorks Model 4300 Ultra 160 single-port LVD I/O Module | DS-SE3ZJ-DA |
| | StorageWorks Model 4300 Ultra 160 dual-port LVD I/O Module | DS-SE3ZJ-SA |
| System Disk Drives (Supported in Model 4254, 4314R, 4354R Universal Drive Shelves) | 9.1-GB Ultra3 (LVD) 10,000 rpm 1.0" Universal drive | 3R-A0584-AA |
| | 9.1-GB Ultra3 (LVD) 15,000 rpm 1.0" Universal drive | 3R-A1542-AA |
| | 18.2-GB Ultra3 (LVD) 15,000 rpm 1.0" Universal drive | 3R-A1543-AA |
| | 36.4-GB Ultra3 (LVD) 10,000 rpm 1.0" Universal drive | 3R-A0919-AA |
| | 18.2-GB Ultra 3 SCSI, 10,000 RPM 1.0" Universal Drive | 3R-A0585-AA |
| | 72.8-GB Ultra 3 SCSI, 10,000 RPM 1.0" Universal Drive | 3R-A3050-AA |

Options

Step 7 –UltraSCSI RAID Array Controllers and UltraSCSI RAID Packaged Solutions – Optional

| | | |
|---|---|--|
| RAID Array 3000 Rackmount Controller Shelf | <ul style="list-style-type: none"> Selection of RA3000 Solutions Software Kit is required Supported SCSI adapter – KZPBA-CB PCI 1-port UltraSCSI differential adapter | |
| | <p>RA3000 rackmount controller shelf, blue, with one controller, 110V DS-SWXRA-GH</p> <p>Includes: UltraSCSI BA356 controller shelf, one HSZ22 2-channel controller with 16-MB cache, integrated Environmental Monitoring Unit (EMU), two 180W power supplies, two dual-port host differential UltraSCSI I/O SBBs, dual-channel UltraSCSI single-ended personality modules, one 120V 1000VA rackmount UPS, 5-m host SCSI cable (BN37A-05), BN38E-0B adapter, UPS serial cable, PC connection serial cable (DB-9), two 68-pin HD tri-link adapters (H8861-AA), two North American power cords, and RETMA mounting bracket (disk shelves and disks not included)</p> <p>Requires: Solutions Software Kit for platform, host adapter, RA3000 disk shelf, and disks</p> <p>Options: Second HSZ22 controller, up to four additional RA3000 disk shelves, cache memory upgrade</p> <hr/> <p>RA3000 rackmount controller shelf, blue, with one controller, 230V DS-SWXRA-GK</p> <p>Includes: UltraSCSI BA356 controller shelf, one HSZ22 2-channel controller with 16-MB cache, integrated Environmental Monitoring Unit (EMU), two 180W power supplies, two dual-port host differential UltraSCSI I/O SBBs, dual-channel UltraSCSI single-ended personality modules, one 230V 1000VA rackmount UPS, 5-m host SCSI cable (BN37A-05), BN38E-0B adapter, UPS serial cable, PC connection serial cable (DB-9), two 68-pin HD tri-link adapters (H8861-AA), RETMA mounting bracket (disk shelves and disks not included)</p> <p>Requires: Solutions Software Kit for platform, two country-specific power cords, host adapter, RA3000 disk shelf, and disks</p> <p>Options: Second HSZ22 controller, up to four additional RA3000 disk shelves, cache memory upgrade</p> | |
| RAID Array 3000 Rackmount Disk Shelf | <ul style="list-style-type: none"> Select one to four disk shelves Third and fourth DS-SWXRA-GN disk shelf ordered will be installed in rear of M-series cabinet; rear mounted shelves require that a 2-m BN37A-02 SCSI cable be ordered | |
| | <p>RA3000 rackmount disk shelf, blue, includes UltraSCSI BA356 disk shelf, two 180W power supplies, single-ended UltraSCSI personality card, one half meter SCSI cable (BN37A-0E), two North American power cords, and RETMA mounting bracket (disks not included); order two country-specific power cords for non-North American use DS-SWXRA-GN</p> | |
| HSZ22 Controller | <ul style="list-style-type: none"> Note that second HSZ22 controller ordered is field installed only, not factory installed; requires BN37A-0E SCSI jumper cable be ordered separately | |
| | <p>Second HSZ22 controller with 16-MB cache and two 16-MB SIMMs for mirror cache, one BN37A-05 5-m UltraSCSI cable, one BN38E-0B cable adapter – field installable only; note that second HSZ22 controller does not require additional Solution Software Kit DS-HSZ22-AA</p> | |
| | <p>Second HSZ22 controller with 32-MB cache and two 32-MB SIMMs for mirror cache, one BN37A-05 5-m UltraSCSI cable, one BN38E-0B cable adapter – field installed only; note that second HSZ22 controller does not require additional Solution Software Kit DS-HSZ22-AB</p> | |
| RA3000 Solutions Software Kit | <ul style="list-style-type: none"> StorageWorks Command Console (SWCC) software Platform specific software Installation scripts and installation documentation | |
| | <p>RA3000 Solutions Software Kit for Tru64 UNIX QB-5TWAB-SA</p> <p>RA3000 Solutions Software Kit for OpenVMS QB-5TWAC-SA</p> | |

Options

Step 7 – UltraSCSI RAID Array Controllers and UltraSCSI RAID Packaged Solutions – Optional *(continued)*

| | | |
|--|---|------------|
| HSG80/HSZ80 External Controllers | Fibre Channel controller (DS-HSG80-BJ), includes 2-MB cache expandable to 128 MB; requires 128697-B21 HSG80 ACS V8.4F software kit or 128698-B21 V8.4P software kit for each HSG80 ordered | 380672-B21 |
| | Fibre Channel controller (DS-HSG80-BH), includes 64-MB cache expandable to 128 MB; requires 128697-B21 HSG80 ACS V8.4F software kit or 128698-B21 V8.4P software kit for each HSG80 ordered | 380671-B21 |
| | UltraSCSI controller (DS-HSZ80-AH), includes 64-MB cache expandable to 128 MB; requires 400569-001 for Tru64 UNIX or 400571-001 for OpenVMS | 400564-B21 |
| | UltraSCSI controller (DS-HSZ80-AJ), includes 256-MB cache expandable to 512 MB; requires 400569-001 for Tru64 UNIX or 400571-001 for OpenVMS | 400565-B21 |
| ESA 10000, RAID Array 7000, RAID Array 8000 | <ul style="list-style-type: none"> Enterprise Storage Array 10000 and RAID Array 7000 (HSZ70) product set are supported on AlphaServer DS10 systems | |
| | <ul style="list-style-type: none"> Supported SCSI adapter for HSZ80/HSZ70 – KZPBA-CB PCI 1-port UltraSCSI differential adapter | |
| | <ul style="list-style-type: none"> Supported SCSI adapter for HSG80 – KGPSA-BC PCI 1-port Fiber-Channel adapter | |

Step 8 – Graphics Adapters – Optional

- RAID Configuration Utility is accessible via console port for Tru64 UNIX and OpenVMS systems; optional graphics capability available
- Select graphics adapter, monitor, and country-specific keyboard if required

| | Maximum # Supported | | | |
|---|---------------------|---------|-------------|-------------|
| | Tru64 UNIX | OpenVMS | Linux-Ready | |
| 3Dlabs Oxygen VX1 32-MB PCI 2D graphics accelerator | 3 | 3 | - | SN-PBXGF-AB |
| ELSA Gloria synergy graphics with 8-MB SGRAM 1600 x 1200, 2D/3D graphics accelerator | 3 | 3 | 1 | SN-PBXGK-BB |
| PowerStorm 300 3D multi-head graphics accelerator with 15-MB frame buffer memory and 16-MB texture memory | 3 | 3 | - | SN-PBXGD-AD |
| PowerStorm 350 3D multi-head graphics accelerator with 30-MB frame buffer memory and 32-MB texture memory | 3 | 3 | - | SN-PBXGD-AE |
| PCI combo adapter, Permedia P2 graphics, 10/100 Mbit NIC | 1 | 1 | 1 | 3X-DEPVD-AA |
| PCI combo adapter, Permedia P2 graphics, 10/100 NIC, 1-port SCSI | 1 | 1 | - | 3X-DEPVZ-AA |
| Ensoniq PCI 1373 audio card with headphone jack and CD audio cable | 1 | 1 | - | SN-AVH10-AC |

Options

Step 9 –Monitors –Optional

- Graphics monitors other than those listed below can be used if compatible with SVGA graphics ordered with system
- Monitors ship with, but are not integrated with the system.

| | |
|---|-------------|
| V570 15" (13.8" viewable image size) multiple-scan color monitor, VGA to 800 x 600 @85 Hz, 0.28mm AG, TCO99, Northern Hemisphere with NA power cord | 3R-A3082-AA |
| Same as above with Eurocord | 3R-A3083-AA |
| Same as above, APD, no power cord | 3R-A3084-AA |

| | |
|--|-------------|
| V500 15" (13.8" viewable image size) auto scanning color monitor, VGA to 1024 x 768 @85 Hz, 0.28mm FST, MPRII, Southern Hemisphere with Australia/New Zealand power cord | 3R-VRQV5-11 |
|--|-------------|

| | |
|--|-------------|
| P710 17" (16" viewable image size) auto-scanning color monitor, Diamondtron NF, 0.25mm aperture grille pitch, VGA to 1280 x 1024 @ 75 Hz, TCO 99; Northern Hemisphere with NA power cord | 3R-A2936-AA |
| Same as above, APD, no power cord | 3R-A2260-AA |
| Same as above, PRC with power cord, CCIB | 3R-A3335-AA |
| Same as above, Southern Hemisphere, with Australia/New Zealand power cord | 3R-A2263-AA |
| Same as above, Northern Hemisphere, with Power Factor Correction and Eurocord, 220V only | 3R-A2261-AA |

| | |
|--|-------------|
| TFT 8020 18" (18.1" viewable image size) flat panel monitor, TFT active matrix, in-plane switching technology 160 degrees viewing angles, 1280 x 1024 resolution, brightness 200 nits, detachable base; requires ELSA GLoria Synergy or PowerStorm 3xx video adapter | 3R-A0852-AA |
|--|-------------|

| | |
|--|-------------|
| P910 19" (18" viewable image size) auto-scanning color monitor, Diamondtron NF, 0.25mm aperture grille pitch, VGA to 1280 x 1024 @ 85 Hz, TCO 99; Northern Hemisphere with NA power cord | 3R-A2935-AA |
| Same as above, PRC with power cord, CCIB | 3R-A3334-AA |
| Same as above, Southern Hemisphere, with Australia/New Zealand power cord | 3R-A2267-AA |
| Same as above, Northern Hemisphere, with power factor correction and Eurocord, 220V only | 3R-A2265-AA |

| | |
|--|-------------|
| P1100 21" (19.6" viewable image size) auto-scanning color monitor, Trinitron CRT, 0.28mm aperture grille pitch, VGA to 1600 x 1200 @75Hz, TCO99, Southern Hemisphere, Australia/New Zealand power cord | 3R-VRQP1-23 |
|--|-------------|

| | |
|--|-------------|
| P1210 22" (20" viewable image size) auto-scanning color monitor, Diamondtron NF, 0.24mm aperture grille pitch, VGA to 1600 x 1200 @ 85 Hz, TCO 99 with power factor correction, Northern Hemisphere with NA power cord | 3R-A2934-AA |
| Same as above with Eurocord | 3R-VRQP2-AA |
| Same as above, PRC with power cord, CCIB | 3R-A3333-AA |
| Same as above, APD, no power cord | 3R-A2268-AA |

Video Extension Cable

| | |
|--|----------|
| Each monitor includes a 1.8-m signal cable – video extension cable required for most server applications | BN39C-02 |
|--|----------|

Monitor Power Cords

| | |
|-----------------------------------|-------------|
| Australia, New Zealand, 2.5 m | BN19H-2E |
| Central Europe, 2.5 m | BN19C-2E |
| Denmark, 2.5 m | BN19K-2E |
| Egypt, India, South Africa, 2.5 m | BN19S-2E |
| Israel, 2.5 m | BN18L-2E |
| Italy, 2.5 m | BN19M-2E |
| Japan, 2.5 m, Dentori approved | 3X-BN46F-02 |
| North America | BN26J-1K |
| Switzerland, 2.5 m | BN19E-2E |
| UK, Ireland, 2.5 m | BN19A-2E |

Options

Step 10 – Networks and Communications – Optional

- Controllers/adapters require a minimum of Tru64 UNIX V4.0F or OpenVMS V7.1-2.
- Systems include dual embedded 10/100 BaseT Ethernet ports (BN25G-xx cable must be ordered separately)
- Additional Ethernet ports can be added using available PCI slots

| | Maximum # Supported | | | |
|---|---------------------|-------------|-------------|-------------|
| | Tru64 UNIX | OpenVMS | Linux-Ready | |
| PCI 1-port 10/100-Mb Ethernet adapter (Twisted Pair) | 1 | - | 1 | 3X-DE600-AA |
| PCI to dual-port 10/100 UTP Fast Ethernet adapter | 1 V4.0F | 1 | 1 | 3X-DE602-AA |
| PCI single-port MMF add-on daughter card for 3X-DE602-AA | 1 | 1 | | 3X-DE602-FA |
| PCI 10/100 Mbit 4-port Ethernet adapter, UTP | 1 | 1 | 1 | DE504-BA |
| Cable for 10BaseT twisted pair connection | | | | BN25G-xx |
| PCI Gigabit Ethernet adapter, SC connectors, MMF, no boot support | 1 | 1 | 1 | DEGPA-SA |
| SC-to-SC dual fiber optic cable | | | | BN34B-xx |
| PCI combo adapter, Permedia P2 graphics, 10/100 Mbit NIC | 1 | 1 | 1 | 3X-DEPVD-AA |
| PCI combo adapter, Permedia P2 graphics, 10/100 NIC, 1-port SCSI | 1 | 1 | - | 3X-DEPVZ-AA |
| PCI FDDI adapter, single attachment station (SAS), multi-mode fiber (MMF), SC connector | 1 | 1 | - | 3X-DEFPA-AC |
| PCI FDDI adapter, DAS, MMF, SC connector | 1 | 1 | - | 3X-DEFPA-DC |
| MIC-SC dual fiber optic cable mm, pp xx = length in meters | | | | BN34D-xx |
| SC-to-SC dual fiber optic cable mm, pp xx = length in meters | | | | BN34B-xx |
| PCI FDDI adapter, SAS, TP-PMD, requires BN25H-03 cable | 1 | 1 | - | 3X-DEFPA-UC |
| PCI FDDI dual adapter, DAS, TP-PMD, requires BN25H-03 cable | 1 | 1 | - | 3X-DEFPA-MC |
| 3m (9.8") FDDI cross-over cable mm, pp xx = length in meters | | | | BN25H-03 |
| PCI 4-port asynchronous controller, cable included; maximum three PBXDA-Ax per system | 3 V4.0F | 3 | - | PBXDA-AA |
| PCI 8-port asynchronous controller, cable included; maximum three PBXDA-Ax per system | 3 V4.0F | 3 | - | PBXDA-AB |
| PCI 16-port asynchronous controller, cable included; maximum three PBXDA-Ax per system | 3 V4.0F | 3 | - | PBXDA-AC |
| PCI-to-ATM 155 Mb adapter - Fiber | 2 V4.0F | 2 V7.2-1 | - | 3X-DAPBA-FA |
| PCI-to-ATM 155 Mb adapter - UTP | 2 V4.0F | 2 V7.2-1 | - | 3X-DAPBA-UA |
| PCI-to-ATM 622 Mb adapter - Fiber | 1 V4.0F | 2 V7.2-1 | - | 3X-DAPCA-FA |
| PCI-to Gigabit Ethernet adapter-UTP, with RJ45 | 1 | - | 1 | DEGPA-TA |
| PCI-to-dual port synchronous controller | - | 2 | - | 3X-PBXDD-AA |
| PCI-to-quad port synchronous controller | - | 2 | - | 3X-PBXDD-AB |

Options

Step 11 – Keyboards, Mouse

Step 11a – Keyboards

- Keyboards are not included with the system and must be ordered separately
- Selection of country-specific keyboard is recommended.

| | Tru64 UNIX | OpenVMS |
|---------------------------|-------------|----------|
| U.S./English keyboard | SN-LKQ47-BA | LK461-A2 |
| Arabic keyboard | SN-LKQ47-BR | - |
| Belgian keyboard | SN-LKQ47-AB | LK461-AB |
| BHCSY keyboard | SN-LKQ47-AX | - |
| Canadian/English keyboard | - | LK461-AQ |
| Canadian/French keyboard | SN-LKQ47-AC | LK461-AC |
| Cyrillic keyboard | SN-LKQ47-BT | LK461-BT |
| Czech keyboard | SN-LKQ47-BV | LK461-BV |
| Danish keyboard | SN-LKQ47-AD | LK461-AD |
| Dutch keyboard | SN-LKQ47-AH | LK461-AH |
| Finnish keyboard | SN-LKQ47-AF | LK461-AF |
| French keyboard | SN-LKQ47-AP | LK461-AP |
| German keyboard | SN-LKQ47-AG | LK461-AG |
| Greek keyboard | SN-LKQ47-BH | LK461-BH |
| Hebrew keyboard | SN-LKQ47-AT | LK461-AT |
| Hungarian keyboard | SN-LKQ47-BQ | LK461-BQ |
| Italian keyboard | SN-LKQ47-AI | LK461-AI |
| Korean keyboard | SN-LKQ47-BK | - |
| Latin-American keyboard | SN-LKQ47-AR | - |
| Norwegian keyboard | SN-LKQ47-AN | LK461-AN |
| Polish keyboard | SN-LKQ47-BP | LK461-BP |
| Portuguese keyboard | SN-LKQ47-AV | LK461-AV |
| Romanian keyboard | - | LK461-BL |
| S. Chinese keyboard | SN-LKQ47-CV | - |
| Slovak keyboard | SN-LKQ47-CZ | LK461-CZ |
| Spanish keyboard | SN-LKQ47-AS | LK461-AS |
| Swedish keyboard | SN-LKQ47-AM | LK461-AM |
| Swiss/French keyboard | SN-LKQ47-AK | LK461-AK |
| Swiss/German keyboard | - | LK461-AL |
| Taiwanese keyboard | SN-LKQ47-BI | - |
| Thai keyboard | SN-LKQ47-CB | - |
| Turkish keyboard | SN-LKQ47-BU | LK461-BU |
| Turkish/French keyboard | - | LK461-BW |
| UK keyboard | SN-LKQ47-AE | - |
| Yugoslavian keyboard | - | LK461-BY |

Options

Step 11 – Keyboards, Mouse *(continued)*

Step 11b – Mouse – Recommended

| | |
|----------------|-------------|
| 3-button mouse | SN-PBQWS-WA |
|----------------|-------------|

Step 12 – MEMORY CHANNEL – Optional

| | |
|-------------------------|---|
| Tru64 UNIX Systems | <ul style="list-style-type: none"> Requires Tru64 UNIX V5.0A or later and either TruCluster Server License (QL-6BRAC-AA or TruCluster Plus Software Package (QP-6R9AC-AA) |
| OpenVMS Systems | <ul style="list-style-type: none"> Requires OpenVMS V7.1-2 or later and OpenVMS Cluster license (QL-MUZAE-AA) |
| Configuring Information | <ul style="list-style-type: none"> Up to one PCI to System Area Network adapters (CCMAB-AA) are supported in a single system Two-node clusters can be configured by ordering a CCMAB-AA for each system and one BN29B-04 or BN29B-10 cable; the cable connects directly to the CCMAB-AA in each system For three or four system nodes, order one CCMAB-AA adapter, one BN29B-04 or BN29B-10 cable and one CCMHB-AA; make connections from the CCMAB-AA in a system to the CCMHB-AA CCMHB-AA includes four CCMLB-AA line cards and supports up to four nodes; expansion up to eight system nodes can be achieved by adding up to four additional CCMLB-AA line cards For integration of MEMORY CHANNEL hubs into cabinet configurations, a rackmount kit (2T-MAVRK-AA) and power cord (BN35S-02) are required |

| | | |
|---------------------------|---|-------------|
| MEMORY CHANNEL Controller | PCI System Area Network Controller, maximum two | CCMAB-AA |
| | System Area Network Hub with four line cards; includes BN19P-2E power cord for Canada, Japan, and US operations—for other regions, order appropriate power cord from list below | CCMHB-AA |
| | Expansion line card for CCMHB hub | CCMLB-AA |
| | 1-m cable for CCMAB and CCMHB | BN39B-01 |
| | 4-m cable for CCMAB and CCMHB | BN39B-04 |
| | 10-m cable for CCMAB and CCMHB | BN39B-10 |
| | Rackmount kit for CCMHB hub | 2T-MAVRK-AA |
| | Power cord for rackmount CCMHB hub | BN35S-02 |

| | | |
|----------------------------|-------------------------|----------|
| MEMORY CHANNEL Power Cords | Australia, New Zealand | BN19H-2E |
| | Central Europe | BN19C-2E |
| | Denmark | BN19K-2E |
| | Egypt, India | BN19S-2E |
| | Ireland, United Kingdom | BN19A-2E |
| | Israel | BN18L-2E |
| | Italy | BN19M-2E |
| | Switzerland | BN19E-2E |

Step 13 – Floor Stand

| | |
|---|-------------|
| Floor Stand for AlphaServer/AlphaStation DS10 | 3X-BA73P-AA |
|---|-------------|

Step 14 – Software – Required selection of media and online documentation kit for first system on site

| | |
|------------|---|
| | <ul style="list-style-type: none"> Software Processor Code = E |
| Tru64 UNIX | <ul style="list-style-type: none"> AlphaServer DS10Tru64 UNIX systems include Base license, Unlimited User license, Server Extension license, Internet Express, iPlanet Directory Server, iPlanet Enterprise Server, and Compaq Secure Web Server. |

Options

Step 14 – Software – Required selection of media and online documentation kit for first system on site (*continued*)

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|-------------|---|-------------|---|-------------|---------------------------|-------------|-------------------------|-------------|---------------------------------|-------------|--|-------------|--|-------------|---|-------------|---|-------------|---|-------------|---|-------------|--|-------------|---|-------------|--|-------------|
| Tru64 UNIX (<i>continued</i>) | <ul style="list-style-type: none"> AlphaStation DS10 Tru64 UNIX systems include 2-user Base license and Compaq Open3D traditional license | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| When using Tru64 UNIX V5.0A or later | <table> <tr> <td>Tru64 UNIX media and online documentation on CD-ROM</td><td>QA-6ADAA-H8</td></tr> <tr> <td>Tru64 UNIX full hard copy documentation</td><td>QA-6ADAA-GZ</td></tr> <tr> <td>TruCluster Plus Software Package with Licenses for TruCluster Server, Logical Storage Manager and AdvFS Utilities</td><td>QP-6R9AC-AA</td></tr> <tr> <td>TruCluster Server License</td><td>QL-6BRAC-AA</td></tr> <tr> <td>AdvFS Utilities License</td><td>QL-0EGAE-AA</td></tr> <tr> <td>Logical Storage Manager License</td><td>QL-2GVAE-AA</td></tr> <tr> <td>Advanced Server for Tru64 UNIX, 25 client concurrent use license</td><td>QL-5U29M-3D</td></tr> <tr> <td>Advanced Server for Tru64 UNIX, 50 client concurrent use license</td><td>QL-5U29M-3E</td></tr> <tr> <td>Advanced Server for Tru64 UNIX, 100 client concurrent use license</td><td>QL-5U29M-3F</td></tr> <tr> <td>Advanced Server for Tru64 UNIX, 250 client concurrent use license</td><td>QL-5U29M-3G</td></tr> <tr> <td>Advanced Server for Tru64 UNIX, 500 client concurrent use license</td><td>QL-5U29M-3H</td></tr> <tr> <td>Layered products media and documentation for Tru64 UNIX on CD-ROM</td><td>QA-054AA-H8</td></tr> <tr> <td>DECnet/OSI end-system license for Tru64 UNIX</td><td>QL-MTJAE-AA</td></tr> <tr> <td>DECnet/OSI extended function license for Tru64 UNIX</td><td>QL-MTKAE-AA</td></tr> <tr> <td>Open3D for Tru64 UNIX on CD-ROM, includes graphics drivers</td><td>QA-0AFAA-H8</td></tr> </table> | Tru64 UNIX media and online documentation on CD-ROM | QA-6ADAA-H8 | Tru64 UNIX full hard copy documentation | QA-6ADAA-GZ | TruCluster Plus Software Package with Licenses for TruCluster Server, Logical Storage Manager and AdvFS Utilities | QP-6R9AC-AA | TruCluster Server License | QL-6BRAC-AA | AdvFS Utilities License | QL-0EGAE-AA | Logical Storage Manager License | QL-2GVAE-AA | Advanced Server for Tru64 UNIX, 25 client concurrent use license | QL-5U29M-3D | Advanced Server for Tru64 UNIX, 50 client concurrent use license | QL-5U29M-3E | Advanced Server for Tru64 UNIX, 100 client concurrent use license | QL-5U29M-3F | Advanced Server for Tru64 UNIX, 250 client concurrent use license | QL-5U29M-3G | Advanced Server for Tru64 UNIX, 500 client concurrent use license | QL-5U29M-3H | Layered products media and documentation for Tru64 UNIX on CD-ROM | QA-054AA-H8 | DECnet/OSI end-system license for Tru64 UNIX | QL-MTJAE-AA | DECnet/OSI extended function license for Tru64 UNIX | QL-MTKAE-AA | Open3D for Tru64 UNIX on CD-ROM, includes graphics drivers | QA-0AFAA-H8 |
| Tru64 UNIX media and online documentation on CD-ROM | QA-6ADAA-H8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Tru64 UNIX full hard copy documentation | QA-6ADAA-GZ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TruCluster Plus Software Package with Licenses for TruCluster Server, Logical Storage Manager and AdvFS Utilities | QP-6R9AC-AA | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TruCluster Server License | QL-6BRAC-AA | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| AdvFS Utilities License | QL-0EGAE-AA | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Logical Storage Manager License | QL-2GVAE-AA | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Advanced Server for Tru64 UNIX, 25 client concurrent use license | QL-5U29M-3D | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Advanced Server for Tru64 UNIX, 50 client concurrent use license | QL-5U29M-3E | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Advanced Server for Tru64 UNIX, 100 client concurrent use license | QL-5U29M-3F | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Advanced Server for Tru64 UNIX, 250 client concurrent use license | QL-5U29M-3G | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Advanced Server for Tru64 UNIX, 500 client concurrent use license | QL-5U29M-3H | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Layered products media and documentation for Tru64 UNIX on CD-ROM | QA-054AA-H8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DECnet/OSI end-system license for Tru64 UNIX | QL-MTJAE-AA | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DECnet/OSI extended function license for Tru64 UNIX | QL-MTKAE-AA | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Open3D for Tru64 UNIX on CD-ROM, includes graphics drivers | QA-0AFAA-H8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Options

Step 14 – Software – Required selection of media and online documentation kit for first system on site (*continued*)

OpenVMS

| | |
|--|-------------|
| <ul style="list-style-type: none">AlphaServer DS10 OpenVMS systems include Base license with System Manager license and Compaq Enterprise Integration Server License Package for OpenVMS Revision V3.0A. | |
| <ul style="list-style-type: none">AlphaStation DS10 OpenVMS systems include Base license, Concurrent Use 1-user license, NAS 150 Client license, and Compaq Open3D traditional license. | |
| <ul style="list-style-type: none">Compaq Enterprise Integration Package includes licenses for TCP/IP Services for OpenVMS, DECwindows Motif for OpenVMS Alpha, DECprint Supervisor for OpenVMS Alpha Plus, DECprint Supervisor for OpenVMS Open, DECnet-Plus for OpenVMS Alpha End System, Archive/Backup System for OpenVMS Management Tools, Archive/Backup Agent for Windows NT, OpenVMS Disk Services for Windows NT, Office Server for OpenVMS, PATHWORKS 32, PATHWORKS V6 for OpenVMS – Advanced Server, and DIGITAL Office Server Client Access License | |
| OpenVMS V7.1-2 media and online documentation on CD-ROM | QA-MT1AR-H8 |
| OpenVMS V7.2-1 media and online documentation on CD-ROM | QA-MT1AT-H8 |
| OpenVMS media and online documentation on CD-ROM | QA-MT1AA-H8 |
| OpenVMS hard copy documentation | QA-001AA-GZ |
| Layered products media and documentation for OpenVMS on CD-ROM | QA-03XAA-H8 |
| Open3D for OpenVMS on CD-ROM, includes graphics drivers | QA-0ADAA-H8 |
| <ul style="list-style-type: none">OpenVMS Concurrent Use licenses provide the right to interactively use the operating system by the specified number of concurrent users on a designated OpenVMS system. OpenVMS Concurrent Use licenses can be moved from one system to another at user discretion and can be shared in a mixed OpenVMS VAX and OpenVMS Alpha cluster. | |
| <ul style="list-style-type: none">OpenVMS Traditional Unlimited Use license is system specific and can only be used on one single system at a time. It cannot be shared between systems or in an OpenVMS VAX or OpenVMS Alpha Cluster. | |
| Concurrent Use 1-user license | QL-MT3AA-3B |
| Concurrent Use 2-user license | QL-MT3AA-3C |
| Concurrent Use 4-user license | QL-MT3AA-3D |
| Concurrent Use 8-user license | QL-MT3AA-3E |
| Concurrent Use 16-user license | QL-MT3AA-3F |
| Concurrent Use 32-user license | QL-MT3AA-3G |
| Concurrent Use 64-user license | QL-MT3AA-3H |
| Concurrent Use 128-user license | QL-MT3AA-3J |
| Concurrent Use 256-user license | QL-MT3AA-3K |
| Traditional Unlimited User license | QL-MT2AE-AA |
| OpenVMS Cluster license for Alpha systems | QL-MUZAC-AA |
| OpenVMS Cluster Client- license for Alpha systems | QL-3MRAC-AA |
| OpenVMS Cluster Client -to Full OpenVMS Cluster Migration- license | QL-6J7AC-AA |

Options

Step 15 – Hardware and Software Support Services

| | |
|---------------------------|--|
| CarePak Priority Services | <ul style="list-style-type: none"> Select one of the optional CarePak Priority Service Packages described below that best supports the customer's operational requirements for system availability. CarePak Priority Services are available for Compaq AlphaServer/AlphaStation systems running Compaq Tru64 UNIX or OpenVMS operating systems. Priority Services are designed for the growing number of customers who need support beyond the basic warranty. Five packages are offered - Priority, Priority Silver, Priority Gold, and Priority Executive with coverage for both Principal servers/stations and SSPs (Subsequent System Packages) – that meet a full range of customer support requirements. |
|---------------------------|--|

Program Features – Principal Server/Station

| | |
|-----------------|--|
| Priority | <ul style="list-style-type: none"> 9x5 HW/SW support 4-hour response on-site hardware support 2-hour response for Bronze software support License Subscription for Compaq O/S software and embedded L/P (i.e., EIS for OpenVMS, unlimited users, and server extensions for Tru64 UNIX) Condist update distribution for OpenVMS or Tru64 UNIX and their layered products. (Layered products not included on Condist can be ordered separately.) |
| Priority 24 | <ul style="list-style-type: none"> 24x7 HW/SW support Named HW engineer 4-hour response on-site hardware support 2-hour response for Bronze software support License Subscription for Compaq O/S software and embedded L/P (i.e., EIS for OpenVMS, unlimited users, and server extensions for Tru64 UNIX) Condist update distribution for OpenVMS or Tru64 UNIX and their layered products. (Layered products not included on Condist can be ordered separately.) |
| Priority Silver | <ul style="list-style-type: none"> 24x7 HW Support with Named Engineer, 4-hour response 24x7 Silver SW Support - Named Account Rep, 1-hour response Monday – Friday, 8AM-5PM local time; 2-hour response remaining hours License Subscription for Compaq O/S software and embedded L/P (i.e., EIS for OpenVMS, unlimited users, and server extensions for Tru64 UNIX) Condist update distribution for OpenVMS or Tru64 UNIX and their layered products. (Layered products not included on Condist can be ordered separately.) Technical newsletter and SW activity review Proactive Patch Notification One (1) System Healthcheck per year |
| Priority Gold | <ul style="list-style-type: none"> 24x7 HW support with Named Engineer, 4-hour response for on-site support 24x7 Gold SW support - Named Account Rep 30-minute callback (critical); 1-hour callback (non-critical) License Subscription for Compaq O/S software and embedded L/P (i.e., EIS for OpenVMS, unlimited users, and server extensions for Tru64 UNIX) Condist update distribution for OpenVMS or Tru64 UNIX and their layered products. (Layered products not included on Condist can be ordered separately.) Technical newsletter, SW activity review and 10 hours Upgrade impact planning Proactive Revision Management Two (2) System Healthchecks per year Mandatory pre-qualification required |

Options

Step 15 – Hardware and Software Support Services *(continued)*

CarePaq Priority Services *(continued)*

Program Features – Principal Server *(continued)*

Priority Gold Executive

- 24x7 HW support with Named Engineer, two-hour response for on-site support
- 24x7 Gold SW support - Named Account Rep
- 30-minute callback (critical); one-hour callback (non-critical)
- License Subscription for Compaq O/S software and embedded L/P (i.e., EIS for OpenVMS, unlimited users, and server extensions for Tru64 UNIX)
- Software update distribution on CD-ROM: OpenVMS or Tru64 UNIX and their layered products (Layered products not included on Condinst can be ordered separately.)
- Technical newsletter, SW activity review and 10 hours Upgrade impact planning
- Proactive Revision Management
- Two (2) System Healthchecks per year
- Customer site must be within 25 miles of a Compaq service location
- Mandatory pre-qualification required

Program Features – Additional Services

SSPs (Subsequent System Packages)

- For Priority, Priority 24, Priority Silver, Priority Gold, and Priority Gold Executive
- HW Support at same level as corresponding package for Principal server/station
- License Subscription: Compaq O/S (where applicable)
- Telephone support through Principal server/station covered by full support package

Installation

- Pre-installation review
- Unpacking of equipment
- Assemble and test
- Basic product usage info
- No software installation added

Installation & Startup Compaq O/S

- Pre-installation review
- Unpacking of equipment
- Assemble and test
- Basic product usage info
- Install operating systems
- Product configuration
- Print and network access
- Orientation

Options

Step 15 – Hardware and Software Support Services *(continued)*

CarePaq Priority Services *(continued)*

| Model/CarePaq Priority Service | Principal Server 1 year | Principal Server 3 years | Subsequent Systems 1 year | Subsequent Systems 3 years |
|--------------------------------------|----------------------------|-----------------------------|------------------------------|-------------------------------|
| AlphaServer/AlphaStation DS10 | | | | |
| Priority | FP-A01BA-12 | FP-A01BA-36 | FP-A21BA-12 | FP-A21BA-36 |
| Priority 24 | FP-A02BA-12 | FP-A02BA-36 | FP-A22BA-12 | FP-A22BA-36 |
| Priority Silver | FP-A04BA-12 | FP-A04BA-36 | FP-A24BA-12 | FP-A24BA-36 |
| Priority Gold | FP-A08BA-12 | FP-A08BA-36 | FP-A28BA-12 | FP-A28BA-36 |
| Priority Gold Exec. | FP-A09BA-12 | FP-A09BA-36 | FP-A29BA-12 | FP-A29BA-36 |
| Installation | FP-AINST-BA | FP-AINST-BA | FP-AINST-BA | FP-AINST-BA |
| Installation & Startup | FP-ASTAR-BA | FP-ASTAR-BA | FP-ASTAR-BA | FP-ASTAR-BA |

Notes:

- AlphaServer/AlphaStation DS10 systems include three years hardware warranty with 5x9, on-site Next Business Day response.
- New Compaq hardware options internal to the AlphaServer/AlphaStation enclosure receive the same warranty or service level as purchased with the server or station.
- External storage devices/cabinets carry their own level of warranty and should be quoted separately for uplifted warranty services (CarePaq Priority Service).
- In addition to the CarePaq Priority Services, uplifted warranty Supplemental Services are available for separate hardware and software support. For more information on Hardware and Software Supplemental Services and other Compaq service options available for AlphaServers and AlphaStations, consult your Compaq Sales Account Manager or visit <http://www.compaq.com/services/>

Technical Specifications

| | | | |
|---|---|---|--|
| Physical Characteristics | Dimensions (HxWxD) 5.1 x 17.6 x 19 in/13 x 45 x 48 cm | | |
| | Weight 36 lbs/16.3 kg | | |
| System Unit | <i>Environmental</i> | | |
| | Temperature | Operating (Tower, Rackmount) | 50° to 104°F/10° to 40°C |
| | | <i>Note: Maximum operating temperature at sea level. Reduce by 1.8°F (1°C) for each 2,000 ft (660 m) above sea level.</i> | |
| | | Non-operating | –40° to 151°F/–40° to 66°C |
| | Humidity | Operating | 10% to 95% |
| | | Non-operating | 20% to 80% |
| | Heat Dissipation | Single unit = 176 Watts = 601 BTU/Hr | |
| | | Rack of 12 systems = 2112 Watts = ~7,212 BTU/Hr | |
| | Typical System | AlphaServer DS10 600 MHz | |
| | | Power Supply, 300W | |
| | | Main logic board containing Alpha CPU, EV6, 466 MHz | |
| | | Main memory = 1 GB | |
| | | (3) Hard disk drive | |
| | | (1) Floppy disk drive | |
| | | (1) CD-ROM disk drive | |
| | | (1) PCI Graphics Card | |
| | | (1) PCI Graphics Card | |
| | | Running system exerciser during the power measurement. | |
| | | Measured Input Voltage = 116 VAC RMS @ 60Hz | |
| | | Measured Input Current = 2.27 Amps RMS | |
| | Measured Input Power = 176 Watts | | |
| | Altitude (unpressurized) | Operating | 40,000 ft/12,192 m |
| Non-operating | | 10,000 ft / 3,048 m | |
| <i>Note: Higher altitudes are possible if maximum operating temperature is reduced.</i> | | | |
| <i>Electrical</i> (Power supplies are universal, PFC, auto ranging, 100/240 Vac) | | | |
| Nominal Voltage (Vac) | | 100 to 120Vac / 220 Vac | |
| Operating Voltage Range (Vac) (temporary condition) | | 90 to 128 Vac /180 to 265 Vac | |
| Power Source Phase | | Single/Single/Single | |
| Nominal Frequency (Hz) | | 60 Hz /50 Hz | |
| Frequency Range (Hz) | | 59 to 61 Hz /49-51 Hz | |
| Maximum Inrush Current | | 11 amps/22 amps | |
| Power Supply (single cordset) | | 12 amps/5 amps | |
| <i>Acoustics</i> (Declared values per ISO 9296 and ISO 7779) | | | |
| Acoustics | | | |
| | <i>L_{WAdB}</i> | <i>L_{pAm}</i> , dBA (Operator position) | <i>L_{pAm}</i> , dBA (Bystander Position) |
| AlphaServer DS10 with one HDD | | | |
| Idle | 5.7 | 48 | 41 |
| Operating | 6.0 | 52 | 45 |

Technical Specifications

| System Unit <i>(continued)</i> | Regulatory | Agency Approvals | <ul style="list-style-type: none"> UL: Listed to UL1950 (3rd edition) CUL Listed: CAN/CSA-C22.2 No. 950-M95 TUV: EN 60950/A11: 1997 GS marked FCC: Part 15 Class B (600-MHz Systems) Class A (466-MHz Systems) CE: EN55022, EN50082 VCCI Class II ITE BMSI: CISPR22, CNS13438 C-Tick: CISPR22, AS/NZS 3548 |
|--------------------------------|------------|------------------|---|
| | | Reviewed to | <ul style="list-style-type: none"> AS/NZ 3260:1993 Australian/New Zealand Standard EN 60950/A11: 1997 European Norm IEC950 (2nd edition, 4th amend) |